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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,430	03/17/2004	Richard M. Fischer JR.	55841US005	3516
32692	7590	08/24/2004	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			PRITCHETT, JOSHUA L	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

# Office Action Summary

Application No.

10/802,430

Applicant(s)

FISCHER ET AL.

Examiner

Joshua L Pritchett

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-17 is/are allowed.
- 6) ☒ Claim(s) 2-10 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

This action is in response to Amendment filed March 17, 2004. Claims 2-17 have been amended and claim 1 has been cancelled as requested by the applicant.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 5-10 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida (US 4,931,655).

Regarding claim 18, Yoshida discloses an accelerated weathering device comprising a weathering fixture (7) adapted to hold the product sample (col. 3 lines 66-68); an illuminator (1) disposed approximate the weathering fixture (7), the illuminator adapted to provide illumination to the product sample (Fig. 4A); wherein the illuminator includes a light source having spectral characteristics in at least the range of 200nm to 400 nm (Fig. 1; col. 2 lines 3-5; col. 3 lines 22-23); and an optical filter disposed proximate the light source, the optical filter comprising a glass having a lead content between 0.5 and 50 percent by weight (col. 3 lines 14-17).

Regarding claim 2, Yoshida discloses the glass is cylindrical (Figs. 3A, 3B).

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Regarding claim 5, Yoshida discloses an ultraviolet transmissive optical filter (outer wall of 1) operably coupled to the lead glass optical filter (Fig. 3A).

Regarding claim 6, Yoshida discloses the ultraviolet transmissive optical filter is constructed from quartz glass (col. 2 lines 54-55).

Regarding claim 7, Yoshida discloses the ultraviolet transmissive optical filter includes an infrared absorbing coating (Fig. 2). Fig. 2 shows that no transmission from the light source has a wavelength greater than 450 nm. which means that no infrared light exits the light source.

Regarding claim 8, Yoshida discloses a plurality of ultraviolet transmissive optical filters (1 and 2a-b; Fig. 3A).

Regarding claim 9, Yoshida discloses two ultraviolet transmissive optical filters (1 and 2a-b; Fig. 3A).

Regarding claim 10, Yoshida discloses the lead glass filter is disposed between the ultraviolet transmissive optical filters (1 and 2b; Fig. 3A).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida in view of Speit (US 4,820,326).

Yoshida teaches the invention as claimed but lacks reference to the thickness of the glass being 0.7 to 10 millimeters. Speit teaches the glass having a thickness of 1 millimeter (col. 2 line 54). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the glass of Yoshida have a thickness between 0.7 and 10 millimeters for the purpose of effectively simulating the weathering process of sunlight's ultraviolet rays.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida in view of Speit as applied to claim 3 above, and further in view of Oguma (US 6,093,484).

Yoshida in combination with Speit teaches the invention as claimed but lacks reference to a lead content of 30 weight percent. Oguma teaches an optical glass filter with a lead content of 30 weight percent (col. 5 lines 23-26). Oguma teaches the use of  $Pb_2O_5$  in a weight percent of between 5 and 45 percent, which means the lead content is between 4.2 and 37.8 in the optical filter. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Yoshida filter have the lead content of Oguma for the purpose of simulating natural sunlight.

***Allowable Subject Matter***

Claims 11-17 are allowed.

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The following is an examiner's statement of reasons for allowance:

Regarding claims 11 and 16, the prior art of record fails to teach or suggest an optical filter comprising lead glass free of visible light absorbing components with a ratio of total irradiance for wavelengths shorter than 290 nm to the total irradiance for wavelengths between 300 and 400 nm to be less than  $2.0 \times 10^{-6}$  and a ratio at 310nm to the total irradiance between 300 and 400 to be greater than  $1.2 \times 10^{-3}$ .

Regarding claim 15, the prior art of record fails to teach or suggest an optical filter comprising lead glass free of visible light absorbing components with a ratio at 310nm to the total irradiance between 300 and 400 to be greater than  $1.2 \times 10^{-3}$ .

The remaining claims depend from claims 11 and 16 and are allowable for the same reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 571-272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLP JP

  
**DREW A. DUNN**  
**SUPERVISORY PATENT EXAMINER**